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**Design and test of a
micro turbine in the
water power laboratory**

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In cooperation with:

Deep River and MEW



Background

This project is in cooperation with Deep River, a company that is active in research and development of small hydropower units. The project focuses on the testing and design of a small propeller turbine, with a head between 2 and 5 meter. The turbine will be a part of a product called «Drop and Go», a portable, simple and efficient way of producing electricity from small waterfalls.



The runner consists of four adjustable blades, and for each of the runner blade angles, several tests will be performed. By measuring the mechanical power from the turbine and hydraulic energy in the water, it is possible to calculate the hydraulic efficiency of the turbine at different operational points. The purpose of the testing is to find the best efficiency point. Using the information from the test results, a new runner that is suitable for one specific head will be designed and tested.

